The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

#### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte Colin D. Nayler

Appeal No. 2006-3228 Application No. 10/002,185 Technology Center 2600

ON BRIEF



Before RUGGIERO, DIXON, and SAADAT, Administrative Patent Judges.

DIXON, Administrative Patent Judge.

**DECISION ON APPEAL** 

This is a decision on appeal under 35 U.S.C. §134 from the Examiner's final rejection of claims 1-13, which are all of the claims pending in this application.

We REVERSE.

#### BACKGROUND

Appellant's invention relates to an arrangement for initializing digital equalizer settings based on comparing digital equalizer outputs to prescribed equalizer outputs. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A method in a physical layer transceiver coupled to a prescribed network medium having an undetermined length, the method comprising:

supplying a prescribed initial set of equalizer settings to a digital feedforward equalizer, the digital feedforward equalizer configured for outputting equalized signal samples based on equalizing retrieved signal samples, having encountered intersymbol interference by transmission via the prescribed network medium, according to supplied equalizer settings;

comparing the equalized signal samples relative to a prescribed equalization threshold; and

selectively changing the supplied equalizer settings, based on the comparing step, until the equalized signal samples reach the prescribed equalization threshold.

#### **PRIOR ART**

The prior art reference of record relied upon by the Examiner in rejecting the appealed claims is:

Lo et al. (Lo)

6,097,767

Aug. 1, 2000

#### REJECTIONS

Claims 1-13 stand rejected under 35 U.S.C. 102(b) as being anticipated by Lo.<sup>1</sup>

Rather than reiterate the conflicting viewpoints advanced by the Examiner and the Appellant regarding the above-noted rejections, we make reference to the Examiner's answer (mailed Apr. 27, 2006) for the reasoning in support of the rejection, and to Appellant's brief (filed Feb. 7, 2006) and reply brief (filed Jun. 21, 2006) for the arguments thereagainst.

## **OPINION**

In reaching our decision in this appeal, we have given careful consideration to Appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by Appellant and the Examiner. As a consequence of our review, we make the determinations that follow.

With respect to independent claim 1, Appellant contends that Lo does not teach the claimed selectively changing the equalizer settings until the equalized signal samples reach the prescribed equalization threshold (Br. 7). We agree with Appellant and find that Lo teaches successively using a number of sets of settings for the phase lock loop (PLL) and the results from each of the sets of settings are used to evaluate and determine the optimum settings for the PLL. Hence, we cannot agree with the Examiner that Lo teaches "selectively changing" the sets since there is no selectivity taught by Lo, but only a successive sequence. Therefore, all the sets are used and

We note that the Examiner only indicated claims 1-9 were rejected in the statement of the rejection, but clearly included rejections of claims 1-13 in the body of the rejection. Therefore, we will address the rejection of all the claims.

there is no endpoint which would teach the "until" limitation. The sets would always use the same sets and end with the same last set thereby not teaching "selectively changing . . . until . . . threshold."

Additionally, we find no teaching of a "threshold" in Lo since there is no comparison to determine the endpoint of the selectively changing settings. The Examiner's reliance upon the optimum being the threshold is unreasonable in our view. We find no comparison after the optimum is determined so that Lo cannot teach the use of the threshold in the comparing step. Therefore, the Examiner has not established a prima facie case of anticipation, and we cannot sustain the rejection of independent claim 1 and its dependent claims 2-5, 10, and 11. Similarly, we will not sustain the rejection of independent claim 6 and its dependent claims for the same reasons.

## **CONCLUSION**

To summarize, we have reversed the rejection of claims 1-13 under 35 U.S.C. § 102.

# **REVERSED**

Joseph F. RUGGIERO Administrative Patent Judge	) )
JOESPH L. DIXON Administrative Patent Judge	) ) BOARD OF PATENT ) APPEALS ) AND ) INTERFERENCES
MAHSHID D. SAADAT Administrative Patent Judge	) -) ) )

MANELLI DENISON & SELTER 2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307